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ABSTRACT

Intended for teacher use, the manual provides for the assessment and training of severely multiply handicapped deaf-blind students with sections on self help, motor development, and sensory stimulation training. Included for each skill are an individual rating scale for periodic assessments, a task analysis, and an actual teaching procedure. Found in the first section, on self help, are guides for teaching self feeding (eating and drinking); grooming (hand and face washing, hairbrushing, toothbrushing, and shaving); toilet training; removing socks, shoes, pants, and pullover shirts and unbuttoning; and putting on socks, shoes, pants, and pullover shirts and buttoning, lacing and shoe tying. Described in Section II, on motor development, are procedures to follow when teaching stationary gross motor skills such as body awareness, relaxation and muscle stimulation, sitting, attaining a standing position, and standing; when teaching movement through space such as non-ambulatory movement and ambulation; and when teaching fine motor skills. Recommended in Section III, on sensory stimulation and training, are visual training methods including light stimulation, eye contact, and visual tracking; auditory training methods involving sound vibrations, using music to develop sound awareness and using receptive language to illicit responses; and activities to stimulate tactile awareness. (PT)

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A MANUAL FOR THE ASSESSMENT AND TRAINING of SEVERELY MULTIPLY HANDICAPPED DEAF-BLIND STUDENTS

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SOUTHBURY TRAINING SCHOOL

A Manual for the Assessment and Training

of

Severely Multiply Handicapped Deaf-Blind Students

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PREFACE

Throughout the ages blindness, particularly when associated with deafness, has been considered one of the most traumatic of all exceptionalities. When this handicap is combined with severe and/or profound mental retardation, the challenge becomes compounded. It is the aim of education to provide every child, regardless of his exceptionality, with the opportunity to develop to the fullest extent of his capabilities and to help prepare him to participate as a contributing member of society.

This curriculum is presented as a guide to help the Southbury Training School staff fulfill our responsibility to the achievement of this aim. There is probably no such thing as a veritable curriculum which meets the needs of all persons possessing this unique handicap. Obviously, this guide is no exception. The basic purpose of this guide is to improve instruction of our students residing at the Southbury Training School. Rather than present theoretical generalities, the various functional areas were tested in a realistic and practical manner and have met the tests of classroom applicability. Techniques which work with one student may not necessarily work with another. Methods which are constructive in one agency may be unsatisfactory elsewhere.

This guide, or parts thereof, may be reproduced in form without permission for the benefit of those concerned. It is hoped that this guide will stimulate and motivate other agencies to share their experiences and insights with their colleagues.

It is through the cooperation, dedication and expertise of Rosemarie Burton, Dennis Calabro and Linda Karmen that this guide assumes its content and form, and I am professionally grateful for their time, efforts and genuine interest in the happiness and welfare of our exceptional students.

FRANK R. GILIBERTY
SUPERINTENDENT

Michael J. Belmont

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DIRECTOR OF EDUCATION AND TRAINING

INTRODUCTION

This manual was prepared by the Deaf/Blind staff at Southbury Training School to serve as both a program assessment instrument and a sequential guide of teaching skills to low functioning multiply handicapped children.

Self-help, motor development and sensory stimulation have been selected as the major areas of emphasis. Each section has an individual rating scale for periodic assessments, a task analysis and an actual procedure.

It is the purpose of this manual to provide a basic guide for those teachers charged with the responsibility of assisting in the functional and educational development of severely multiply handicapped deaf/blind children. It should be helpful in establishing initial objectives and activities from which individual program plans can be created.

As future revisions are planned, we welcome receiving your written comments and suggestions.

Special thanks and recognition are given to Michael T. Collins and James M. Rudolph for use of A Manual For The Assessment Of A "Deaf-Blind" Multiply Handicapped Child.

Special commendation is made to the following teachers for their professional contribution and assistance: Nancy Ayre, Donald Baker, Cynthia Balsamo, Ellyn Carrington, and Suzanne Seitz.

Thanks to Brenda Dilley, secretary, for the typing of this manuscript.

Personal and professional acknowledgement is hereby given to Linda Karmen and Dennis Calabro for sharing their expertise in making this manual a working document for persons wishing to serve deaf/blind individuals.

Permission is hereby granted to duplicate any or all of this manual.

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Instructions

At the beginning of each section can be found a rating scale which is intended to be a documentation of the child's abilities. Therefore, the child should be evaluated with regard to what he has demonstrated that he can do.

For the first assessment (Column 1), please indicate with a checkmark (X) all of the items on the scales that the child has accomplished to date. For all subsequent assessments (Columns 2-6), indicate all items accomplished since the date of the immediately preceding assessment.

Example:

1.	2.	3.	4.	5.	6.	Food Spillage
X						1. Spills everything off of spoon in raising it to mouth
	X					2. Spills 75% or more food in raising spoon to mouth
		X				3. Spills about 50% of food in raising spoon to mouth
			X			4. Spills about 33% or less in raising spoon to mouth
				X		5. Spills about 10% or less in raising spoon to mouth
					X	6. No spillage

One can readily see the improvements made by the child between assessments. It is recommended that assessments be completed twice yearly (e.g. November and May).

SELF-HELP

I. Self-Feeding

- A. Eating
- B. Drinking

II. Grooming

- A. Hand washing
- B. Face Washing
- C. Toothbrushing
- D. Hairbrushing
- E. Shaving

III. Toilet Training

IV. Undressing

- A. Socks
- B. Shoes
- C. Pants
- D. Pullover shirt
- E. Unbuttoning

V. Dressing

- A. Socks
- B. Shoes
- C. Pants
- D. Pullover shirt
- E. Buttoning
- F. Lacing
- G. Shoe-tying

EATING

1.	2.	3.	4.	5.	6.	
						Finger Foods
—	—	—	—	—	—	1. Does not handle finger foods
—	—	—	—	—	—	2. Grasps food, but does not transfer to mouth
—	—	—	—	—	—	3. Puts food to mouth and sucks or tongues
—	—	—	—	—	—	4. Holds and munches on some finger foods
—	—	—	—	—	—	5. Will independently hand feed a variety of finger foods
						Holding Spoon
—	—	—	—	—	—	1. Will not hold spoon
—	—	—	—	—	—	2. Tolerates being manipulated in holding spoon
—	—	—	—	—	—	3. Will hold spoon independently for short periods of time
—	—	—	—	—	—	4. Holds spoon independently
						Raising to mouth
—	—	—	—	—	—	1. Raises spoon to mouth when released 1 inch from mouth
—	—	—	—	—	—	2. Raises spoon to mouth when released 4 inches from mouth
—	—	—	—	—	—	3. Raises spoon to mouth when released 7 inches from mouth
—	—	—	—	—	—	4. Raises spoon to mouth after scooping
						Scooping
—	—	—	—	—	—	1. Will not scoop
—	—	—	—	—	—	2. Will scoop partially on his own
—	—	—	—	—	—	3. Will scoop completely on his own
—	—	—	—	—	—	4. Will scoop with total physical assistance
						Spillage
—	—	—	—	—	—	1. Spills everything off of spoon in raising to mouth
—	—	—	—	—	—	2. Spills 75% or more food in raising spoon to mouth
—	—	—	—	—	—	3. Spills about 50% of food in raising spoon to mouth
—	—	—	—	—	—	4. Spills about 35% or less in raising spoon to mouth
—	—	—	—	—	—	5. Spills about 10% or less in raising spoon to mouth
—	—	—	—	—	—	6. No spillage

TASK ANALYSIS

1. The child holds his left hand in front of the plate, so that he will know the exact location of the dish.
2. The child grasps the spoon.
3. The child scoops the food off of the plate.
4. The child raises the spoon to his mouth.
5. The child opens mouth and closes lips around the spoon.
6. The child chews food and swallows.
7. The child lowers the spoon back down to the plate.

PROCEDURE

Immediately before the child is to begin eating the eat sign should be made with the child's hand, 2 or 3 times. The child will hopefully make the connection between the sign and the food and may develop the ability to express a need.

In teaching a severely or profoundly retarded, deaf-blind child to eat, many difficulties arise which have to be overcome before the child can eat independently. In many cases the child is unable to grasp the spoon. Some suggestions that may benefit the child in helping him to grasp are:

Grasping

1. A rope is tied horizontally across the front of the child as he is sitting. Attached to the rope are 4 noise-making toys.

2. The child should be physically assisted in reaching and grasping for any of the objects.

3. After the child initiates his own movement, the physical assistance should be dropped to 50% of the time, only touching the arm while the child completes the task.

4. When the child completes Step 3 80% of the time, the assistance can be eliminated. However, the child is to still reach and grasp for the toys upon verbal and physical prompts with intermittent rewards.

    a. To have the child reach for and grasp an object with minimal physical assistance.

        1. The child is to be sitting and 1 object is to be held in front of him at the midline position.

        2. Upon verbal prompts and slight tapping to the arm, the child is to reach for and grasp the object.

        3. The child should be rewarded for the task no matter how long he holds the object before dropping it.

    b. To increase voluntary muscle control of the child's fingers and hands and to develop an awareness of other objects i.e. vibrating objects, clay, balls, bean bags, cotton, styrofoam, lollipops, and bells.

        1. During exercises with the hand and fingers the child's hands are constantly being manipulated. This includes gently flexing the fingers back and forth to increase flexibility.

Grasping contd.

2. A massager (electric toothbrush holder) is used to stimulate muscles in the child's hands.

3. Objects are placed into the child's hands and his fingers are wrapped around them to develop the method of grasping.

Jaw and Lip Closure

Many children may exhibit poor jaw and lip closure. To facilitate the jaw closure, the person working with the child should:

1. Jaw Closure

   a. Rub the child's jaw slowly and gently before and after the food has been placed in his mouth.

   b. Rub the area in front of his ear gently.

2. Lip Closure

   a. Divide the child's oral area into 4 quadrants and with minimal pressure, wipe each quadrant 4 times with a terry cloth (do not wipe lips). Do this before the onset of each meal.

Biting and Chewing

Another obstacle that the child may have to overcome is his inability to bite and chew. Some suggestions that may benefit the child in learning to bite and chew are:

1. All foods that need to be chewed should be placed in the side of the child's mouth between his teeth to encourage the use of his teeth. Since this program depends mostly on the child's palate, reinforcement must be handled very carefully. We cannot reinforce for liking the taste of certain foods. Rather, reinforcement is to be given whenever the child tries harder to accommodate solid foods.

2. The person working with the child should then break up a cookie or a cracker into small pieces and mix it into applesauce, ice cream or whatever is available.

3. As the child's tolerance for solid food increases, exhibited by his acceptance of the small pieces in his food, place small amounts of applesauce, ice cream, etc. on top of the cookie or cracker and encourage the child to bite off a piece of cookie to get the ice cream or whatever is on top of it.

Biting and Chewing contd.

4. Peanut butter is a good food for getting the child to exercise and develop his jaw muscles.

5. An orange can be used to initiate chewing, mainly because it provides the child with an instant reward.

6. Any type of brittle food that is easy to bite such as a cracker or wafer is excellent in teaching a child to bite.

Swallowing

1. To facilitate and improve the child's swallowing (food and liquids) the person working with the child should:

   a. Before and during each mouthful, gently rub the child's throat down from under his chin to his collar bone.

   b. Always position the child in a sitting position before giving him any food or fluids. Never feed in a lying down position, always be sure head is upright or held slightly downward to encourage use of proper muscles.

2. To discourage tongue thrusting, the following steps should be followed:

   a. Place spoon near middle or back of the child's tongue.

   b. Apply slight pressure; he will push against the pressure.

   c. Move his chin from side to side; with your thumb push up on soft part behind his chin.

   d. Use this manipulative exercise throughout the meal.

Finger Feeding

Another important consideration having to do with self-feeding with a spoon is that many times the child is not ready for this type of feeding. In this case it is recommended that the child begin with finger feeding. Finger feeding is usually not a skill that needs to be taught, since most children go through a stage where they develop the ability to bring the hand to the mouth.

Finger Feeding contd.

1. The first step in finger feeding involves softer foods (peanut butter, applesauce, pudding). The teacher dips the child's finger into the food and guides it to his mouth. Here the child is merely required to lick the food off his finger.

2. Then small pieces of solid foods (that usually melt in the mouth) are put in the child's hand. Eventually the child should initiate or be encouraged to pick up pieces of food (soft-chewable) and direct them to his mouth himself. Here chewing can also be developed by slowly introducing more chewable foods.

3. The next step is to have the child bite off, chew, and swallow the small pieces of cookies, bread, fruit, etc. that he himself has picked up from the table.

EVALUATION

Another important and necessary facet of the child's feeding program is the data collection. Two methods of collecting data on the child are:

1. Management chart for feeding.

2. Daily evaluation of new food experiences.

From the information obtained on these two charts you can evaluate and make revisions on the child's progress.

MANAGEMENT CHART FOR FEEDING PROGRAM

Name	Size of Portion	Type of Food	Hand Preference	Method of Eating	Method of Drinking	Food Preference
	(small, medium, large)	(puree, semi-solid, solid)	(left, right)	location: size of table, chair position of teacher and amount of assistance required adaptive devices used: type of spoon plate chewing and swallowing problems	type of cup or glass used position of teacher and amount of assistance required swallowing problems	specific likes & dislikes

DAILY EVALUATION OF NEW FOOD EXPERIENCES

Name	Date	Meal	Food Tried	Child's Reaction
		Breakfast, lunch, dinner, a.m. snack, p.m. snack		

DRINKING

1.	2.	3.	4.	5.	6.	
						0. Will not swallow liquids
—	—	—	—	—	—	1. Swallows liquids when they are put in her mouth
—	—	—	—	—	—	2. Drinks from a cup (glass) with total physical manipulation
—	—	—	—	—	—	3. Holds cup with 2 hands and drinks unassisted
—	—	—	—	—	—	4. Brings cup halfway to mouth with 2 hands and drinks unassisted
—	—	—	—	—	—	5. Brings cup from table to mouth w/ 2 hands and drinks unassisted
—	—	—	—	—	—	6. Brings cup from table to mouth w/2 hands, drinks unassisted, releases cup when liquid is gone
—	—	—	—	—	—	7. Brings cup from table to mouth w/2 hands, drinks unassisted, returns cup to table w/ 50% accuracy
—	—	—	—	—	—	8. Brings cup from table to mouth w/2 hands, drinks unassisted, returns cup to table
—	—	—	—	—	—	9. Brings cup from table to mouth w/1 hand, drinks with assistance
—	—	—	—	—	—	10. Brings cup from table to mouthw/1 hand, drinks unassisted, releases cup when liquid is gone
—	—	—	—	—	—	11. Brings cup from table to mouth w/1 hand, drinks unassisted, returns cup to table w/ 50% accuracy
—	—	—	—	—	—	12. Brings cup from table to mouth w/1 hand, drinks unassisted, returns cup to table
—	—	—	—	—	—	13. Percent of spillage (Record # in space)
—	—	—	—	—	—	14. Adaptive device used: if any (Record in space)
—	—	—	—	—	—	

TASK ANALYSIS

1. Child grasps the glass with his hand.
2. Child picks up the glass and brings it to his mouth.
3. Child makes oral contact with glass and closes his lips around glass.
4. Child tips glass to drink.
5. Child swallows liquid.
6. Child returns glass to table.

PROCEDURE

Even the slightest visual or motor handicap can affect a child's performance in learning to drink. There are certain adaptations which can be introduced to accommodate specific difficulties. Listed below are some of the problems which could be encountered and suggested remedies:

Grasping the Glass: If the child has poor muscular control or grasping ability, select a cup or glass that is slightly oversized or has one or two handles to facilitate initial grasping problems. This type of modification can be changed as the child gains proficiency in motor control. (See also feeding)

Picking up the Glass: Physical prompting and tactile cues are essential with the deaf-blind child, because you cannot always depend on visual imitation or response to verbal cues.

1. Begin with assisting the child by actually lifting the glass in the child's hand from table to mouth.

2. Fade physical assistance as the glass gets closer to the child's mouth by removing your hand from the child's, and by allowing the child to complete the action independently.

3. This assistance should diminish correlative to the increased ability of the child, until the child can complete the entire action independently.

4. If the child is capable of picking the glass up but is not aware of what to do when the glass is in his hand, a tactile cue, such as a tap under the wrist in an upward motion can be used to encourage the child to initiate the activity.

Lip Closure: Once the child makes oral contact with the glass, lip closure may be a problem. If the child cannot close his mouth around the glass, try using an adaptive device, such as a training cup with a spouted lid (Tommy Tippee) to induce a type of sucking motion, thereby closing the lips. Another method is to form the child's lips around the glass or the adaptive device to familiarize the child with lip closure. (See also feeding)

Procedure contd.

Tipping the Glass: Many vision impaired children will have a problem with spillage due to their inability to judge the amount of liquid in the glass. A method of teaching this type of judgment may be as follows:

1. Place only a small amount of liquid in the glass, just enough for 1 mouthful and have the child drink that amount. The same amount is to be poured into the glass each succeeding trial until all the liquid is consumed, if the child drinks without spillage. If there is spillage, succeeding trials will thus use smaller amounts.

2. When the child completes Step 1 with 80% success, add a little more liquid to the glass and maintain that amount until 80% success without spillage is achieved.

3. Continue to add more liquid to the glass when each level of success is attained. Assist the child initially by placing one finger at the bottom of the glass when the glass needs tipping, until the child is able to tip it himself.

Swallowing: (See Feeding)

Returning Glass to table:

1. As soon as all liquid in the glass is finished, cue the return of the glass to the table with taps to the wrist in a downward motion.

2. As the child begins to initiate the task, guide the glass to the table in an upright position.

3. Assistance is faded when the child returns the glass to the table 50% of the time in response to only one cue (one tap on the wrist).

4. When the child achieves 100% success responding to only the cue, the cue is presented on a fading variable schedule and eventually eliminated. The child is then to complete the task unassisted.

HAND WASHING

1.	2.	3.	4.	5.	6.	
						Wetting Hands
—	—	—	—	—	—	1. Will not tolerate getting hands wet
—	—	—	—	—	—	2. Tolerates getting hands wet
—	—	—	—	—	—	3. Wets hands with assistance
—	—	—	—	—	—	4. Wets hands independently
—	—	—	—	—	—	5. Turns water on with total physical assistance
—	—	—	—	—	—	6. Turns water on after hand is guided to knob
—	—	—	—	—	—	7. Turns off water with total physical assistance
—	—	—	—	—	—	8. Turns off water after hand is guided to knob
						Lathering
—	—	—	—	—	—	1. Will not tolerate soap on hands
—	—	—	—	—	—	2. Tolerates soap being rubbed on hands
—	—	—	—	—	—	3. Grasps soap with total physical assistance
—	—	—	—	—	—	4. Grasps soap after hand is guided to it
—	—	—	—	—	—	5. Lathers with total physical assistance
—	—	—	—	—	—	6. Lathers after hand is guided to it
—	—	—	—	—	—	7. Rinses with total physical assistance
—	—	—	—	—	—	8. Rinses after lathering
						Drying
—	—	—	—	—	—	1. Gets towel with total physical assistance
—	—	—	—	—	—	2. Gets towel with no physical assistance
—	—	—	—	—	—	3. Will not tolerate drying hands
—	—	—	—	—	—	4. Dries hands with total physical assistance
—	—	—	—	—	—	5. Dries hands partially with towel
—	—	—	—	—	—	6. Dries hands completely with towel

PROCEDURE

Grooming can be one of the most difficult things for a deaf-blind child to master. Understandably, if a child cannot see himself, he will not know if his face or hands are dirty or if his hair isn't combed. Hopefully using a consistent time scheduled approach for the development of grooming skills, the deaf-blind child can be properly groomed at all times.

1. Signing: rubbing child's palms together.

2. Guiding the child's hands to turn on one faucet at a time as the child feels the water coming out of the faucet.

3. Placing a bar of soap into the water, prompting the child to pick up the soap.

4. Raise the child's hands out of the water and lather up using the soap in the child's hands.

5. Once hands are properly lathered up, the child's hands are to be physically manipulated through the hand-washing process.

6. Fading should begin once child appears to be mastering skill. It should take the form of guiding his hands whenever necessary to guiding his wrists whenever necessary to guiding forearms when necessary. The object being less and less physical reinforcement with more and more independent washing.

7. Once hands are properly washed, the child should be physically prompted to rinse them in the basin.

8. Once rinsing process is completed, the child's hands should be guided to a towel and his hands physically manipulated through the drying process. Assistance should be faded as child gains independence.

9. Once hands are dried properly, teacher makes the "all finished" sign together with the child..

FACE WASHING

1.	2.	3.	4.	5.	6.	
—	—	—	—	—	—	1. Will not tolerate face getting wet
—	—	—	—	—	—	2. Tolerates face getting wet
—	—	—	—	—	—	3. Uses washcloth to wash face with total physical assistance
—	—	—	—	—	—	4. Will wash face partially with facecloth
—	—	—	—	—	—	5. Will wash face totally with washcloth
—	—	—	—	—	—	6. Dries face with total physical assistance
—	—	—	—	—	—	7. Dries face partially with towel
—	—	—	—	—	—	8. Dries face completely with towel

PROCEDURE

1. The child's hands are physically prompted to turn on one faucet at a time.
2. The child feels the water coming out of the faucet.
3. Guide the child's hands into the basin of water.
4. Place a bar of soap into the water, prompting the child to pick it up.
5. Place a facecloth into the water, prompting the child to pick it up.
6. Guide the child's hand holding the soap and the hand holding the facecloth together in a rubbing motion.
7. Prompt the child to drop the soap and raise the facecloth out of water with both hands.
8. Prompt the child to squeeze the water out of the facecloth and unfold it around his favored hand.
9. Prompt the child to wash his face going through the face-washing procedure. Prompts are to be given when necessary.
10. Once face is properly washed, guide the child's hands to a towel and physically manipulate them through the drying procedure.
11. Make the "all finished" sign with the child.

TOOTHBRUSHING

1.	2.	3.	4.	5.	6.
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—

1. Will not tolerate teeth being brushed
2. Tolerates teeth being brushed
3. Child holds toothbrush with total physical assistance
4. Child holds toothbrush part of the time independently
5. Child holds toothbrush independently
6. Brushes teeth with total physical assistance
7. Brushes teeth partially on his own
8. Brushes teeth completely independently

PROCEDURE

1. Guide the child's hands to the tube of toothpaste and physically prompt him to remove the cap.

2. Guide the child's hand to the toothbrush and place the tip of the tube on top of the brush while simultaneously squeezing the tube.

3. Physically guide the child's favored hand holding the toothbrush to his mouth and physically prompt him to brush his teeth in a stroking motion.

4. Fading should begin once the child appears to be mastering the skill. It should take the form of guiding his hands, to guiding his wrists, to guiding his forearms when necessary.

5. Once teeth have been properly brushed, prompt the child to rinse his brush.

6. Make the "all finished" sign with the child.

HAIR BRUSHING

1. 2. 3. 4. 5. 6.

—	—	—	—	—	—	1. Will not tolerate hair being brushed
—	—	—	—	—	—	2. Tolerates hair being brushed
—	—	—	—	—	—	3. Brushes hair forward with total physical assistance
—	—	—	—	—	—	4. Brushes hair forward partially on his own
—	—	—	—	—	—	5. Brushes hair forward completely on his own

PROCEDURE

1. Place a brush on a table in front of the child.
2. Guide the child's hand to feel the brush and prompt him to pick it up.
3. Manipulate the child's hand to bring the brush to his head.
4. Guide his hand through the brushing process.
5. Fading should begin once the child begins exhibiting independence.

SHAVING

1.	2.	3.	4.	5.	6.
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—

1. Student will not tolerate face being shaved
2. Student tolerates face being shaved
3. Student turns on razor with assistance
4. Student turns on razor independently
5. Student needs total physical assistance in shaving
6. Student shaves self partially
7. Student shaves self independently

PROCEDURE

1. The child should be seated and his hands prompted to pick up the razor.
2. Prompt the child to turn on the razor.
3. Prompt the child to raise the razor to his face and physically manipulate his hands to shave.
4. Fading should take the form of guiding the child's hands to guiding his wrists to prompting his forearms.
5. Once task is successfully completed, make the "all finished" sign together with the child.

TOILETING

1.	2.	3.	4.	5.	6.	
—	—	—	—	—	—	1. Soils and urinates in pants, shows no discomfort
—	—	—	—	—	—	2. Soils and urinates in pants, shows discomfort
—	—	—	—	—	—	3. Soils and urinates in pants, removes pants when wet
—	—	—	—	—	—	4. Can sit on toilet (or potty chair)
—	—	—	—	—	—	5. Can be brought to toilet on time schedule with infrequently successful results (50%)
—	—	—	—	—	—	6. Can be brought to toilet on time schedule with frequently successful results (50%)
—	—	—	—	—	—	7. Can be brough to toilet on time schedule with consistently successful results (90%)
—	—	—	—	—	—	8. Communicates need to eliminate
—	—	—	—	—	—	9. Eliminates in toilet when indicates need

In items 10-15, record PA if the child requires physical assistance with the task; VC if the child requires only a verbal cue; MC if the child requires a manual cue (sign); and X if the child does the task automatically.

—	—	—	—	—	—	10. Walks to and from toilet
—	—	—	—	—	—	11. Pulls down pants
—	—	—	—	—	—	12. Wipes self
—	—	—	—	—	—	13. Stands up
—	—	—	—	—	—	14. Pulls up pants
—	—	—	—	—	—	15. Flushes toilet

TASK ANALYSIS

1. Walks to toilet (signs)
2. Takes down pants and underpants
3. Sits on toilet (signs)
4. Eliminates (signs)
5. Stands up
6. Wipes self
7. Flushes toilet
8. Pulls up underpants and pants
9. Returns to classroom

PROCEDURE

The sequence of steps for toileting presupposes the child's ability to perform other skills such as dressing and undressing; standing up, sitting down and walking, which are related to the entire task of toilet training. However, due to certain physical handicaps or developmental setbacks, a child may not have been able to master some or any of these skills. Depending on the severity of these handicaps, a child can be toilet trained if the teacher is willing to assist and accommodate the child's impairments. The rewarding experience of learning a positive skill can often far outweigh the inconveniences of teaching that skill.

Time-toilet-training

1. Time-chart the child at 10-minute intervals for 2 weeks to determine a schedule of elimination.

   a. If a regular pattern is observed, establish a schedule for placing the child on the toilet.

   b. If habits prove irregular, continue to check the child every 15 minutes and put on toilet once during an hour or half-hour period.

2. Once a program schedule is established, the child is brought to the bathroom in accordance with the times designated. At this time the child is assisted in manually signing toilet (slight tap with whole right hand to right hip).

3. The child pulls her pants down, with assistance if necessary and sits down on the toilet.

4. Have the child sit for intervals of not longer than 15 minutes (warm water may be used to encourage elimination). Sit in front of the child and give verbal encouragement and praise, as well as any hand games (clapping, singing) or social reinforcement for sitting on the toilet.

5. If the child does not eliminate, remove her from the toilet, and assist pulling pants up, if necessary.

6. If the child does eliminate, reward verbally while manipulating the toilet sign with her hand.

Procedure contd.

7. Remove the child from the toilet immediately and assist in flushing the toilet and pulling pants up.

8. Daily records are to be kept on time charts (10 minute intervals) so that a regular schedule of elimination on the toilet can be determined.

9. Remember that during this daily procedure you are associating a means of communicating the need to eliminate (sign) with the actual event. It is your responsibility to respond to any attempt on the child's part to elicit even an approximation of this method of communication.

UNDRESSING & DRESSING

The following two sections deal with methods of teaching the Deaf-Blind child to dress and undress himself. They are based on a systematic breakdown of each segment of dressing and undressing. Progress usually comes in small steps and a suitable method is necessary to measure this progress. The criterion for success required on each step should be established by the person working with the child. We have found that 80% is a satisfactory indicator.

Both verbal prompting and reinforcement will be used in correlation with and in addition to signing. In many cases due to the degree of retardation, it is practically impossible to determine the amount of residual hearing or sight an individual has and therefore, unwise to rely on strictly one mode of communication.

In teaching these skills, it is also important to realize that many adaptations and accommodations will have to be made to provide a suitable training situation for the multi-handicapped youngster. Hopefully, once these barriers are overcome, comfortable training sessions and progress can be achieved.

1.	2.	3.	4.	5.	6.	Socks
—	—	—	—	—	—	1. Child needs total physical assistance in removing sock.
—	—	—	—	—	—	2. Child removes sock from toes
—	—	—	—	—	—	3. Child removes sock from mid-way between heel and toes
—	—	—	—	—	—	4. Child removes sock from heel
—	—	—	—	—	—	5. Child removes sock from ankle
—	—	—	—	—	—	6. Child removes sock completely on cue

TASK ANALYSIS

1. Child removes sock from toes.
2. Child removes sock from mid-way between heel and toes.
3. Child removes sock from heel.
4. Child removes sock from ankle.
5. Child removes sock completely on cue.

PROCEDURE

1. Seat the child in front of you.
2. Give verbal command and sign for the child to take off his sock and physically manipulate his hands to perform the task.
3. Place the sock over the child's toes.
4. Prompt child to remove sock from this position.
5. If no response occurs, repeat command and physically manipulate child's hands to perform task.
6. If successful, reward appropriately.
7. When child has reached criterion set for success, proceed to next step on Task Analysis and follow same procedure.

UNDRESSING

1.	2.	3.	4.	5.	6.
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—

Shoes

1. Child needs total physical assistance in removing shoe
2. Child removes shoe from toes
3. Child removes shoe from midway between heel and toes
4. Child removes shoe from heel
5. Child removes shoe completely on cue

TASK ANALYSIS

1. Child removes shoe from toes
2. Child removes shoe from midway between heel and toes
3. Child removes shoe from heel
4. Child removes shoe completely on cue

PROCEDURE

1. Seat the child in front of you.
2. Give verbal command and sign for the child to take off his shoe and physically manipulate his hands to perform the task, if necessary.
3. Place the shoe over the child's toes.
4. Prompt child to remove shoe from this position.
5. If no response occurs; repeat command and physically manipulate child's hands to perform the task.
6. If successful, reward appropriately.
7. When child has reached criterion set for success, proceed to the next step on the Task Analysis and follow the same procedure.

UNDRESSING

1.	2.	3.	4.	5.	6.
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—

Pants

1. Child needs total physical assistance in removing pants
2. Child removes pants when 1 leg is in and 1 leg is out
3. Child removes pants from the ankle level
4. Child removes pants from the knee level
5. Child removes pants from the thigh level
6. Child removes pants completely on cue

TASK ANALYSIS

1. Child removes pants when 1 leg is in and 1 leg is out of pants
2. Child removes pants when pulled down to the ankle level
3. Child removes pants from the knee level
4. Child removes pants from the thigh level
5. Child removes pants completely on cue

PROCEDURE

1. Seat the child in front of you.
2. Give verbal command and sign for the child to take off his pants and physically manipulate his hands to perform the task, if necessary.
3. Place child's leg in pants, leaving other leg out completely.
4. Prompt the child to remove the pants from this position.
5. If no response occurs, repeat command and physically manipulate child's hands to perform the task.
6. If successful, reward appropriately.
7. When child has reached criterion set for success, proceed to next step on Task Analysis and follow the same procedure.

UNDRESSING

1.	2.	3.	4.	5.	6.	Pullover shirt
—	—	—	—	—	—	1. Child needs total physical assistance in removing shirt
—	—	—	—	—	—	2. Child removes shirt when base of shirt is pulled over his head and the neck of shirt is around child's forehead
—	—	—	—	—	—	3. Child removes shirt when base of shirt is pulled over his head and the neck of shirt is around the child's chin
—	—	—	—	—	—	4. Child removes shirt when both sleeves are pulled to the elbow level
—	—	—	—	—	—	5. Child removes shirt when 1 sleeve is pulled to the elbow level and the base of the shirt is pulled up to armpit level
—	—	—	—	—	—	6. Child removes shirt when the base of shirt is pulled up to chest level
—	—	—	—	—	—	7. Child removes shirt when the base of shirt is pulled up to the stomach level
—	—	—	—	—	—	8. Child removes shirt completely on cue

TASK ANALYSIS

1. Child removes shirt when base of shirt is pulled over his head and the neck of shirt is around child's forehead

2. Child removes shirt when base of shirt is pulled over his head and the neck of shirt is around child's chin

3. Child removes shirt when both sleeves are pulled to elbow level

4. Child removes shirt when 1 sleeve is pulled to the elbow level and the base of the shirt is pulled up to armpit level

5. Child removes shirt when the base of shirt is pulled up to chest level

6. Child removes shirt when the base of shirt is pulled up to the stomach level

7. Child removes shirt completely on cue

PROCEDURE

1. Seat the child in front of you.

2. Give verbal command and sign for the child to take off his shirt and physically manipulate his hands to perform the task.

3. Place the neck of shirt over the child's forehead and pull the base of shirt over his head.

4. Prompt the child to remove shirt from this position.

5. If no response occurs, repeat command and physically manipulate the child's hands to perform task.

6. If successful, reward appropriately.

7. When child has reached criterion set for success, proceed to next step on Task Analysis and follow the same procedure.

UNDRESSING

1.	2.	3.	4.	5.	6.	Button Shirt
—	—	—	—	—	—	1. Child needs total physical assistance in removing shirt
—	—	—	—	—	—	2. Child removes shirt when teacher unbuttons it and takes off 1 sleeve
—	—	—	—	—	—	3. Child removes shirt when teacher unbuttons it and pulls 1 sleeve down to the elbow level
—	—	—	—	—	—	4. Child removes shirt when teacher unbuttons it
—	—	—	—	—	—	5. Child unbuttons shirt when buttons are 1/2 of the way through the holes and takes it off
—	—	—	—	—	—	6. Child unbuttons shirt when buttons are 1/4 of the way through the holes and takes it off
—	—	—	—	—	—	7. Child removes shirt completely on cue

TASK ANALYSIS

1. Child removes shirt when teacher unbuttons it and takes off 1 sleeve
2. Child removes shirt when teacher unbuttons it and pulls 1 sleeve down to the elbow level
3. Child removes shirt when teacher unbuttons it
4. Child unbuttons shirt when buttons are 1/2 of the way through the holes and takes it off
5. Child unbuttons shirt when buttons are 1/4 of the way through the holes and takes it off
6. Child removes shirt completely on cue

PROCEDURE

1. Seat the child in front of you.
2. Give verbal command and sign for the child to take off his shirt and physically manipulate his hands to perform the task, if necessary.
3. Unbutton the child's shirt and take off 1 sleeve completely.
4. Prompt the child to remove shirt from this position.
5. If no response occurs, repeat command and physically manipulate child's hands to perform task.
6. If successful, reward appropriately.
7. When child has reached criterion set for success, proceed to next step on Task Analysis and follow the same procedure.

DRESSING

In teaching most dressing skills, it is usually helpful to begin teaching the skill using an article of clothing that is a size or two, too big for the youngster. The advantage of this technique is that it would be easier for the child to learn the skill. Once the child begins exhibiting success, use articles of clothing that fit or come closer to his actual size.

An added suggestion in teaching buttoning would be to use an article of clothing with larger buttons and holes such as an overcoat or sportcoat. An article of clothing with larger buttons sewn on it would also be suitable. Using a buttoning board is also good to supplement your buttoning program.

A lacing board can be a valuable experience for a youngster learning how to lace his shoe. In teaching a youngster how to tie his shoe, it is useful to begin by using a rope or shoelace approximately 30" long. Place the rope under the child's thigh and proceed to teach him the steps involved. This method allows the youngster many advantages in learning the skill.

1.	2.	3.	4.	5.	6.	Socks
—	—	—	—	—	—	1. Child needs total physical assistance in putting on sock
—	—	—	—	—	—	2. Pulls up sock from ankle level
—	—	—	—	—	—	3. Pulls up sock from heel
—	—	—	—	—	—	4. Pulls up sock midway between heel and toes
—	—	—	—	—	—	5. Pulls up sock when placed over toes
—	—	—	—	—	—	6. Puts on sock when handed to him directly outside of foot
—	—	—	—	—	—	7. Child picks up sock and puts on completely on cue

TASK ANALYSIS

1. Pulls up sock from ankle level
2. Pulls up sock from heel
3. Pulls up sock midway between heel and toes
4. Pulls up sock when placed over toes
5. Puts on sock when handed to him directly outside of foot
6. Child picks up sock and puts on completely on cue

PROCEDURE

1. Seat the child in front of you.
2. Give verbal command and sign for the child to put on his sock and physically manipulate his hands to perform the task.
3. Place the sock up to the ankle level of the child.
4. Prompt the child to put on sock from this position.
5. If no response occurs, repeat command and physically manipulate child's hands to perform the task.
6. If successful, reward appropriately.
7. When child has reached criterion set for success, proceed to next step on Task Analysis and follow the same procedure.

DRESSING

1.	2.	3.	4.	5.	6.	Shoes
—	—	—	—	—	—	1. Child needs total physical assistance in putting on shoe
—	—	—	—	—	—	2. Child puts on shoe from heel
—	—	—	—	—	—	3. Child puts on shoe when it is midway between heel and toes
—	—	—	—	—	—	4. Child puts on shoe when placed over toes
—	—	—	—	—	—	5. Child puts on shoe when handed to him directly outside of foot
—	—	—	—	—	—	6. Child picks up shoe and puts on completely on cue

TASK ANALYSIS

1. Child puts on shoe from heel
2. Child puts on shoe when it is midway between heel and toes
3. Child puts on shoe when placed over toes
4. Child puts on shoe when handed to him directly outside of foot
5. Child picks up shoe and puts on completely on cue

PROCEDURE

1. Seat the child in front of you.

2. Give verbal command and sign for the child to put on his shoe and physically manipulate his hands to perform the task.

3. Put the shoe on the child up to the heel level.

4. Prompt the child to put on the shoe from this position.

5. If no response occurs, repeat command and physically manipulate the child's hands to perform the task.

6. If successful, reward appropriately.

7. When child has reached criterion set for success, proceed to next step on Task Analysis and follow the same procedure.

DRESSING

1.	2.	3.	4.	5.	6.	Pullover shirt
—	—	—	—	—	—	1. Child needs total physical assistance in putting on shirt
—	—	—	—	—	—	2. Child puts on shirt when neck of shirt is around child's chin and both arms are in sleeves
—	—	—	—	—	—	3. Child puts on shirt when the neck of shirt is around child's forehead and 1 arm is in sleeve and the other arm is about to enter sleeve
—	—	—	—	—	—	4. Child puts on shirt when the neck of shirt is on the top of his head and both arms about to enter sleeves
—	—	—	—	—	—	5. Child puts on shirt when handed to him in proper position
—	—	—	—	—	—	6. Child picks up and puts on shirt on cue

TASK ANALYSIS

1. Child puts on shirt when neck of shirt is around child's chin and both arms are in sleeves
2. Child puts on shirt when the neck of shirt is around child's forehead and 1 arm is in sleeve and the other arm is about to enter sleeve
3. Child puts on shirt when the neck of shirt is on the top of his head and both arms about to enter sleeves
4. Child puts on shirt when handed to him in proper position
5. Child picks up and puts on shirt on cue

PROCEDURE

1. Seat the child in front of you.

2. Give verbal command and sign for the child to put on his shirt and physically manipulate his hands to perform the task.

3. Place the neck of shirt around child's chin and place both child's arms in sleeves.

4. Prompt the child to put on shirt from this position.

5. If no response occurs, repeat command and physically manipulate child's hands to perform task.

6. If successful, reward appropriately.

7. When child has reached criterion set for success, proceed to next step on Task Analysis and follow the same procedure.

DRESSING

1.	2.	3.	4.	5.	6.
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—

Button shirt

1. Child needs total physical assistance in putting on shirt
2. Child puts on shirt when 1 arm is in sleeve and the other arm is up to the elbow level in sleeve
3. Child puts on shirt when 1 arm is in sleeve and the other arm is about to enter sleeve
4. Child puts on shirt when 1 arm is in up to the elbow level and the other arm is out completely
5. Child puts on shirt when 1 arm is about to enter sleeve
6. Child picks up shirt and puts on completely on cue

TASK ANALYSIS

1. Child puts on shirt when 1 arm is in sleeve and the other arm is up to the elbow level in sleeve
2. Child puts on shirt when 1 arm is in sleeve and the other arm is about to enter sleeve
3. Child puts on shirt when 1 arm is in up to the elbow level and the other arm is out completely
4. Child puts on shirt when 1 arm is about to enter sleeve
5. Child picks up shirt and puts on completely on cue

PROCEDURE

1. Seat the child in front of you.

2. Give verbal command and sign for the child to put on his shirt and physically manipulate his hands to perform the task.

3. Put the child's arm in 1 sleeve and the other arm in the other sleeve up to the elbow level.

4. Prompt the child to put on the shirt from this position.

5. If no response occurs, repeat command and physically prompt the child to complete the task.

6. If successful, reward appropriately.

7. When child has reached criterion set for success, proceed to next step on Task Analysis and follow the same procedure.

DRESSING

1.	2.	3.	4.	5.	6.	Buttoning
—	—	—	—	—	—	1. Child needs total physical assistance in buttoning
—	—	—	—	—	—	2. Child buttons when button is 3/4 of the way through the hole
—	—	—	—	—	—	3. Child buttons when button is 1/2 of the way through the hole
—	—	—	—	—	—	4. Child buttons when button is 1/4 of the way through the hole
—	—	—	—	—	—	5. Child buttons when fingers are guided to proper button and proper hole
—	—	—	—	—	—	6. Child buttons shirt on cue

TASK ANALYSIS

1. Child buttons when button is 3/4 of the way through the hole
2. Child buttons when button is 1/2 of the way through the hole
3. Child buttons when button is 1/4 of the way through the hole
4. Child buttons when fingers are guided to proper button and proper hole
5. Child buttons shirt on cue

PROCEDURE

1. Seat the child in front of you.

2. Give the verbal command and sign for the child to button his shirt and physically manipulate his fingers to complete the task.

3. Place the button 3/4 of the way through the hole.

4. Prompt the child to pull the button through the hole from this position.

5. If no response occurs, repeat command and physically manipulate child's fingers to perform the task.

6. If successful, reward appropriately.

7. When child has reached criterion set for success, proceed to next step on Task Analysis and follow the same procedure.

DRESSING

1.	2.	3.	4.	5.	6.	Pants
—	—	—	—	—	—	1. Child needs total physical assistance in putting on pants
—	—	—	—	—	—	2. Child puts on pants from thigh level
—	—	—	—	—	—	3. Child puts on pants from knee level
—	—	—	—	—	—	4. Child puts on pants from ankle level
—	—	—	—	—	—	5. Child puts on pants when 1 leg is in and 1 leg is out
—	—	—	—	—	—	6. Child puts on pants when handed to him
—	—	—	—	—	—	7. Child picks up and puts on pants on cue

TASK ANALYSIS

1. Child puts on pants from thigh level
2. Child puts on pants from knee level
3. Child puts on pants from ankle level
4. Child puts on pants when 1 leg is in and 1 leg is out
5. Child puts on pants when handed to him
6. Child picks up and puts on pants on cue

PROCEDURE

1. Seat the child in front of you.

2. Give verbal command and sign for the child to put on his pants and physically manipulate his hands to perform the task.

3. Put the pants on the child up to the thigh level.

4. Prompt the child to put on the pants from this position.

5. If no response occurs, repeat command and physically manipulate the child's hands to perform the task.

6. If successful, reward appropriately.

7. When child has reached criterion set for success, proceed to next step on Task Analysis and follow the same procedure.

DRESSING

1.	2.	3.	4.	5.	6.	Lacing
—	—	—	—	—	—	1. Child needs total physical assistance in lacing shoe
—	—	—	—	—	—	2. Child laces 1 hole
—	—	—	—	—	—	3. Child laces 2 holes
—	—	—	—	—	—	4. Child laces 3 holes
—	—	—	—	—	—	5. Child laces 4 holes
—	—	—	—	—	—	6. Child laces 5 holes
—	—	—	—	—	—	7. Child laces 6 holes
—	—	—	—	—	—	8. Child laces shoe on cue

TASK ANALYSIS

1. Child laces 1 hole
2. Child laces 2 holes
3. Child laces 3 holes
4. Child laces 4 holes
5. Child laces 5 holes
6. Child laces 6 holes
7. Child laces shoe on cue

PROCEDURE

1. Seat the child in front of you.
2. Give verbal command and sign for the child to lace his shoe and physically manipulate his fingers to perform the task.
3. Unlace 1 hole.
4. Prompt the child to lace the hole.
5. If no response occurs, repeat command and physically manipulate child's fingers to perform task.
6. If successful, reward appropriately.
7. When child has reached criterion set for success, proceed to next step on Task Analysis and follow the same procedure.

DRESSING

1.	2.	3.	4.	5.	6.	Tying shoe
—	—	—	—	—	—	1. Child needs total physical assistance in tying shoe
—	—	—	—	—	—	2. Child holds both ends of the shoelace in the air with prompting
—	—	—	—	—	—	3. Child holds both ends of the shoelace in the air independently
—	—	—	—	—	—	4. Child takes left end and places it on right side
—	—	—	—	—	—	5. Child takes right end and places it over left end
—	—	—	—	—	—	6. Child inserts right end under left
—	—	—	—	—	—	7. Child pulls both ends
—	—	—	—	—	—	8. Child makes bow with right hand
—	—	—	—	—	—	9. Child picks up left end, circumvents bow and inserts the same end under itself
—	—	—	—	—	—	10. Child pulls both the inserted end and the bow simultaneously

TASK ANALYSIS

1. Child holds both ends of the shoelace in the air with prompting
2. Child holds both ends of the shoelace in the air independently
3. Child takes left end and places it on right side
4. Child takes right end and places it over left end
5. Child inserts right end under left
6. Child pulls both ends
7. Child makes bow with right hand
8. Child picks up left end, circumvents bow and inserts the same end under itself
9. Child pulls both the inserted end and the bow simultaneously

PROCEDURE

1. Seat the child in front of you.

2. Give verbal command and sign for the child to tie his shoe and physically manipulate his hands to perform the task.

3. Untie shoe.

4. Prompt the child to hold both ends in the air.

5. If no response occurs, repeat command and physically manipulate child's hands to perform the task.

6. If successful, reward appropriately.

7. When child has reached criterion set for success, proceed to next step on Task Analysis and follow the same procedure.

MOTOR DEVELOPMENT

STATIONARY GROSS MOTOR DEVELOPMENT

I. Body Awareness
II. Relaxation & Muscle Stimulation
III. Sitting
IV. Attaining a Standing Position
V. Standing

MOVEMENT THROUGH SPACE

I. Non-Ambulatory Movement
II. Ambulation

FINE MOTOR DEVELOPMENT

GROSS MOTOR DEVELOPMENT

Gross Motor skills play an important role in the overall development of the deaf/blind child. Activities which increase body awareness also assist in molding the child's self-image and stimulate a relationship between the child and other persons and an awareness of the environment. Particularly valuable in this area are activities that involve coactive movement and exercises for relaxation and muscle stimulation.

The long term goal of any child's gross motor program should be when possible, mobility. It is essential to motivate the child to interact with the environment, and movement through space is a means of primary contact with and exploration of the environment. In many cases walking will not be a feasible goal, but there are other ways of enabling the child to move around the environment, even if she is non-ambulatory. Once again, it is important to stress contact with the environment, in order to capitalize on the child's residual vision and hearing and to develop her other senses. This will help the child to overcome the barriers presented by her handicap and prevent withdrawal behind walls of darkness and silence.

GROSS MOTOR: STATIONARY

1.	2.	3.	4.	5.	6.	
						Body Movement
—	—	—	—	—	—	1. Resists being manipulated through body movements
—	—	—	—	—	—	2. Allows self to be manipulated through body movements
—	—	—	—	—	—	3. Exhibits spasticity which prohibits smooth voluntary muscle control
—	—	—	—	—	—	4. Has limited voluntary muscle control due to specific physical handicap
—	—	—	—	—	—	5. Physical handicap also inhibits manipulative body movements
						Head Control
—	—	—	—	—	—	1. Physically unable to move head
—	—	—	—	—	—	2. Lifts head briefly from prone position
—	—	—	—	—	—	3. Lifts head briefly from supine position
—	—	—	—	—	—	4. Head droops forward when sitting
—	—	—	—	—	—	5. Head flops backward when sitting
—	—	—	—	—	—	6. Lifts head and chest, weight on hands or forearms, from prone position
—	—	—	—	—	—	7. Considerable head lag when pulled from supine to sitting position
—	—	—	—	—	—	8. Minimal head lag when pulled from supine to sitting position
—	—	—	—	—	—	9. No head lag when pulled from supine to sitting position
—	—	—	—	—	—	10. Head erect and steady while sitting
						Rolling
—	—	—	—	—	—	1. Does not roll independently
—	—	—	—	—	—	2. Rolls from prone to supine position
—	—	—	—	—	—	3. Rolls from supine to prone position
—	—	—	—	—	—	4. Rolls from prone to supine to prone, etc., in a continuous movement
—	—	—	—	—	—	5. Uses rolling as a means of mobility
						Balance
—	—	—	—	—	—	1. No balancing reaction
—	—	—	—	—	—	2. Head and trunk balancing reaction when lifted up and tilted laterally
—	—	—	—	—	—	3. Shows protective reaction if balance suddenly disturbed laterally or forward while sitting

1.	2.	3.	4.	5.	6.	Balance contd.
—	—	—	—	—	—	4. Shows protective reaction if balance suddenly disturbed backwards while sitting
—	—	—	—	—	—	5. Parachute reaction - protective reaction of arms when held vertically and tilted forward toward ground (i.e., rolling forward on a big canvas ball)
—	—	—	—	—	—	6. Maintains standing position when balance disturbed from any direction
—	—	—	—	—	—	7. Can squat without using hands for balance
—	—	—	—	—	—	8. Can stand on one foot
—	—	—	—	—	—	9. Can stand on tip toes
—	—	—	—	—	—	10. Can stand with heel touching toes (straight line)
						Sitting
—	—	—	—	—	—	1. Physical handicap prevents sitting
—	—	—	—	—	—	2. Does not sit (physically able)
—	—	—	—	—	—	3. Sits on floor or in chair with support
—	—	—	—	—	—	4. Can pull self to sitting position from supine
—	—	—	—	—	—	5. Can sit unsupported momentarily
—	—	—	—	—	—	6. Can sit unsupported for at least 10 minutes
—	—	—	—	—	—	7. Can sit unsupported indefinitely
—	—	—	—	—	—	8. Gets to and from sitting independently with ease (on floor)
—	—	—	—	—	—	9. Must be placed in a sitting position due to physical handicap
—	—	—	—	—	—	10. Sits down and gets up from chair with assistance
—	—	—	—	—	—	11. Sits down and gets up from chair without physical assistance, on verbal or tactile cue
—	—	—	—	—	—	12. Sits down and gets up from chair unassisted
						Attaining a standing position
—	—	—	—	—	—	1. Physical handicap prevents standing
—	—	—	—	—	—	2. Cannot rise to standing position (physically able)
—	—	—	—	—	—	3. Rises to standing position with total physical assistance
—	—	—	—	—	—	4. Rises to standing position with physical assistance, using one hand
—	—	—	—	—	—	5. Pulls to standing position using large objects or railing
—	—	—	—	—	—	6. Pulls to standing position using small object, such as a stick, string, pulley, etc.
—	—	—	—	—	—	7. Rises to standing position without assistance

1.	2.	3.	4.	5.	6.	Standing
—	—	—	—	—	—	1. Physical handicap prevents standing
—	—	—	—	—	—	2. Does not stand (physically able)
—	—	—	—	—	—	3. Bounces when held in standing position
—	—	—	—	—	—	4. Starts to put weight on feet when body is held in standing position
—	—	—	—	—	—	5. Sustains weight with maximal support (physical assistance, standing table, etc)
—	—	—	—	—	—	6. Stands by grasping support with both hands
—	—	—	—	—	—	7. Stands by grasping support with one hand
—	—	—	—	—	—	8. Stands alone momentarily without support
—	—	—	—	—	—	9. Stands alone for at least one minute
—	—	—	—	—	—	10. Stands alone for at least ten minutes
—	—	—	—	—	—	11. Stands alone indefinitely

Motor Activity

Co-active movement is a tool for reaching and entering the world of a deaf/blind individual. The state of deafness and blindness is one of isolation and fear. For the deaf/blind individual to respond to his environment, he must feel a profound sense of trust and concern for his world and his welfare. Co-active movement is a primary step in the development of this trust and comes by entering the world of a deaf/blind individual on his level; involving yourself in his experiences. When he feels you experiencing his experiences, his natural movement, his world, the basis for a trusting teaching situation are formulated. He is now aware that you are with him, on his level and he will have the trust in you to come out and experience your world.

Co-Active Activities

1. Move with and/or imitate the individual's movement.

   If the child has no mobility and exhibits only movement when sitting, sit near him/her or place child on your lap and move with the child's natural movement; whether it be a waving hand or whole-body rocking. If the child has mobility, follow and imitate his movement close enough to him so that he can see or sense you.

2. When the individual begins to know your presence and is aware of your movement, introduce a variation to the child's movement to see if he is ready to come into your world.

3. Using any form of mobility, i.e., crawling, rolling, rocking, walking, imitate and move with him to music.

4. Do with, rather than show to, when first introducing a task. If the child feels you doing the task with him, guiding him through the steps, he may be more encouraged about doing the task.

RELAXATION AND MUSCLE STIMULATION

For the child who is handicapped with spasticity, cerebral palsy, hyperreflexia, limb contractures, or other disabling physical characteristics, a daily exercise program to relax and/or stimulate and develop muscle control can have a tremendous affect on the overall disposition of the child.

A. Spasticity in the arms

1. Prior to mealtime or any manual activity, rub and tap the child's arm for a period of approximately 5 minutes.

2. When the arm becomes supple, then the activity can begin.

3. As the child's arm responds more quickly to rubbing and tapping, reduce the time spent on relaxation before an activity (to 4 minutes, then 3 minutes, etc.)

4. Continue this until the arm no longer needs relaxation, as told by the lessening of jerky movements and increased control.

B. Arm contractures

1. To lessen degree of flexion, stimulate triceps muscle by vibrations (vibrator, electric toothbrush handle).

2. Begin with about 10 minutes daily and increase or decrease as needed.

C. Tightly clenched fist

1. Rub palms and fingers; move fingers in open/close motion as much as possible without straining.

2. As soon as the child's hand opens, place a cone, musical instrument (bell) or small textured object in the hand to give the sensation of holding.

D. Head control

1. Place child in supine position, lift head up and down (as part of daily exercise program).

2. Place child prone on a mat,with arms over a small roll or pillow. Holding her by thighs and pelvis, push her gently backward and forward. Attract her attention by playing a musical instrument in front of her. While child is in same position, turn head to left and to right, 5 times to each side. (as part of daily exercise program)

3. Sit child in a comfortable position. Use a musical instrument or flashlight or hang an object from ceiling as an attention-getter. If the child's head is flopped forward, position the stimulus object slightly above the child's head and use it to encourage lifting the head up. If the child's head flops back, position stimulus slightly below eye level to encourage bringing head forward.

SITTING

The child's ability to assume a proper sitting position can greatly affect her performance in other skill areas such as eating, toileting, and attending to a manual task. If she is uncomfortable or cannot maintain a sitting position, more than likely her attention span and tolerance for the activity will be minimal. Particularly for the child whose physical limitations are prohibitive to walking, it is essential to introduce training for proper sitting and strengthening of upper torso muscles. Three areas for developing programs follow:

A. Sit-ups

A daily exercise program of sit-ups can be instrumental in developing trunk and head control and in strengthening muscles in the arms and upper torso.

Goal: The child will pull herself up to a sitting position from a supine position.

1. Sit on a mat facing child who is in a supine position. Your legs straddle the child's body; the child's legs straddle over your pelvic area.

2. Reach for the child's hands. As the child finds your hands, position her hands so that the child can obtain a firm grip.

3. Saying "(child's name) sit up," prompt the child by starting to pull her up; then ease up to encourage more work on the child's part.

4. As the child obtains an upright position, remove your hands, allowing her to balance herself for five seconds.

5. Reward appropriately for completion of the task.

6. Take child's hands and allow her to ease herself back down to a supine position.

7. Determine criteria for success and repeat steps 2-6 as the child's ability warrants.

B. Sitting in a chair

Many children who have not had the simple practice of sitting in a chair will have difficulty with balance, head control and proper positioning. Many of the initial problems can be remediated by using adaptive devices or different sized or shaped chairs to accommodate the size and shape of the child. It may be necessary to offer the child full support by either using a waistband restraint, or a tray or table that fits to the chair and will keep the child from flopping forward or sideways. Gradually these aids can be removed as the child gains confidence and proficiency.

1. Sit the child in a suitable chair for approximately 15 minutes daily, with proper restraining support to maintain posture and offer rewarding visual, auditory or tactile activity.

   Examples: Listening to music through headphones.
   Hanging musical instruments in front of the child, but slightly above eye level to encourage the child to hold her head up.
   Water play at table.
   Textured materials or musical instruments on the surface of the table.
   A lighted cosmetic mirror, to stimulate use of residual vision.

   Increase the required sitting time by a few minutes daily until the child can sit for periods of up to 30 minutes.

2. Once the child begins to develop body control and can exhibit acceptable sitting posture, begin removing the restraining support for brief intervals, beginning with less than one minute and gradually increasing the intervals as the child gains confidence and proficiency.

3. Whenever the child demonstrates the ability to sit without slouching or head hanging, she must be reinforced for the accomplishment.

4. As the timed intervals begin to exceed 5 minutes, the child should be required to maintain or exceed the time accomplished at the previous session. However, it is necessary to take into consideration the types of activities the child has experienced during the day; poor performance on a specific day could be due to mental or physical exhaustion.

5. Determine criteria for success and continue steps 2-4 until the child can sit comfortably for long periods of time in a chair suited to her physical needs.

C. Independent sitting

Once the child can assume good sitting posture in a chair, it is helpful to introduce a program for independent sitting; with this skill, the child can sit on a bench, on the floor, on a swing, develop better balance, and gain increased confidence in her body control.

1. The child is seated on the floor (tailor-fashioned, legs straight or side sitting) or on a bench if the physical impairment so dictates. Sit behind the child, allowing her to lean against you and get used to the position.

2. Involve the child in some type of musical or other attention-getting activity during this time.

3. Increase the time the child is required to sit each day until a predetermined interval is achieved.

4. Once criteria is reached in Step 3, maintain this time for approximately one week to insure proper stretching and strengthening of muscles.

5. Then sit a few inches away from the child and manipulate the child's hands to the floor to offer necessary self-support. This procedure continues with suitable reinforcement, on the same schedule described in Steps 3-4.

6. Once the child becomes adept at balancing herself, try to encourage the use of only one hand for support by engaging the child in activities which require reaching for an object.

7. Repeat step 6, encouraging the child to use two hands to reach for or grasp an object, until the child can maintain her balance without support. A consistent schedule of reinforcement is essential throughout to develop the child's motivation and confidence.

ATTAINING A STANDING POSITION

A. From a supine position

1. Child, in supine position on the floor, knees bent. Sit at the child's feet.

2. Sign and verbalize command for stand up, place your index finger in the child's clutched fists as child is to pull herself up to a sitting, then standing position (this activity might be preceded by sit-ups)

3. Reward at completion of entire task.

4. Replace your support with a rod or pulley placed horizontally in front of the child. Familiarize child with change in task and repeat steps 1-3.

5. Determine criteria for success and then gradually reduce amount of support until child can stand up independently in response to the sign and/or verbal cue.

B. From a kneeling position

1. Child assumes a kneeling position. Stand in front of child and sign and verbalize command for stand up. Place your index fingers in child's clutched fists and encourage child to pull herself up to a standing position.

2. Determine criteria for success and when achieved, go on to step 3.

3. Place a support, such as a table or bench in front of the child, sign and verbalize the command for stand up, and encourage the child to pull herself up while holding on to the support. Familiarize child with change in task, by allowing her to know the size, shape and texture of the new support.

4. Determine criteria for success and once achieved, gradually reduce assistance and support until the child can respond to the verbal and/or manual cue.

C. From a seated position

1. Child is seated in a chair with feet touching the floor. You either sit or stand facing child.

2. Sign and verbalize command for stand up, extend your hands to be enclosed in child's and encourage the child to pull herself up to a standing position.

3. Continue as in programs A and B, gradually fading support until independence is achieved.

STANDING

A. Standing table (standing box)

The standing table is useful for strengthening legs and familiarizing the child with standing in an upright position.

1. Place the child in a standing table and determine a baseline by seeing how long the child can remain there without showing fatigue.

2. Each day increase the amount of time required for the child to remain standing. Sixty minutes is usually a reasonable long-term goal. It is often helpful to engage the child in an activity, such as listening to music with headphones or playing with a favorite toy or musical instrument. A lighted cosmetic mirror will sometimes serve as a source of endless enjoyment and stimulation.

B. Bench

1. Place the child facing a bench (no lower than waist level), feet on the floor, bent at waist, upper torso resting on bench. Offer minimal, preferably no, support. The child is rewarded every 10 seconds with an edible and verbal reinforcement for standing unassisted.

2. Gradually increase intervals between reinforcements and continue until child can maintain a standing position for 5 minutes, while being reinforced at a frequency not less than 30 seconds.

3. Once the child can stand at the bench for 5 consecutive minutes, place the child facing a bar at shoulder level (See C.)

C. Chinning bar

1. Child is held in standing position while her arms are placed over a chinning bar attached to a gymnasium apparatus. The bar should be at the child's underarm height and no more than eighteen inches from the apparatus. The child is to assume a standing position.

2. Stand behind the child and praise verbally and physically while the child is standing. Step back if possible, and offer only minimal support, if any.

3. This procedure should be carried on with alternating rest periods between trials, until the child can maintain a standing position with no support from you for 5 consecutive minutes.

D. Independent standing

1. Have the child attain a standing position with or without your support.

2. Make sure that the child is standing with head and back as straight as can be expected. Remove all support and reward at 10 second intervals.

3. Stretch intervals by 15 seconds when 80% accuracy is achieved, until child can stand alone for 5 minutes.

GROSS MOTOR: MOVEMENT THROUGH SPACE

1.	2.	3.	4.	5.	6.	
						Non-Ambulatory Movement
—	—	—	—	—	—	1. Does not move body in space
—	—	—	—	—	—	2. Moves self by rolling or by pushing or pulling body across floor
—	—	—	—	—	—	3. Travels by scooting on seat; lying on back or pushing with foot
—	—	—	—	—	—	4. Crawls, using hands and knees
—	—	—	—	—	—	5. Achieves creeping position (on hands and knees, stomach off floor) assisted
—	—	—	—	—	—	6. Achieves creeping position unassisted
—	—	—	—	—	—	7. Holds head up in creeping position
—	—	—	—	—	—	8. Creeps independently but without reciprocal leg movement
—	—	—	—	—	—	9. Creeps with assistance for a few feet, using reciprocal leg movements
—	—	—	—	—	—	10. Creeps reciprocally without assistance
—	—	—	—	—	—	11. Creeps freely in space in correct position
—	—	—	—	—	—	12. Physical handicap prevents independent movement through space, child confined to wheelchair as permanent means of mobility
—	—	—	—	—	—	13. Confined child can manipulate own wheelchair in movement through space
						Ambulation
—	—	—	—	—	—	1. Physical handicap prevents walking
—	—	—	—	—	—	2. Does not move in space on feet
—	—	—	—	—	—	3. Tolerates adult manipulation and attempts moving feet
—	—	—	—	—	—	4. Cooperates and moves feet while being held under armpits
—	—	—	—	—	—	5. Cooperates and moves feet with assistance of a walker
—	—	—	—	—	—	6. Walks using side steps (holding onto furniture)
—	—	—	—	—	—	7. Walks with two hands held by adult
—	—	—	—	—	—	8. Walks with one hand held by adult
—	—	—	—	—	—	9. Walks while holding onto object for support (string, Stick, etc)
—	—	—	—	—	—	10. Walks alone a few steps when support is removed
—	—	—	—	—	—	11. Walks alone with awkward gait, arms out, unequal steps
—	—	—	—	—	—	12. Walks across room; starts & stops, may still fall; momentarily walks on hands and feet
—	—	—	—	—	—	13. Walks alone, seldom falls
—	—	—	—	—	—	14. Walks alone, seldom falls, with proper heel-toe gait and arm swing
—	—	—	—	—	—	15. Reverses direction with ease
—	—	—	—	—	—	16. Walks on tip toes

1.	2.	3.	4.	5.	6.	Ambulation contd.
—	—	—	—	—	—	17. Walks on irregular surfaces (inclines, curbs, rough terrain) with assistance
—	—	—	—	—	—	18. Walks on irregular surfaces independently
—	—	—	—	—	—	19. Cannot climb upstairs
—	—	—	—	—	—	20. Climbs upstairs with physical assistance
—	—	—	—	—	—	21. Climbs upstairs using rail, without physical assistance
—	—	—	—	—	—	22. Climbs upstairs using rail, with alternating feet
—	—	—	—	—	—	23. Climbs upstairs without rail, alternating feet
—	—	—	—	—	—	24. Cannot climb downstairs
—	—	—	—	—	—	25. Climbs downstairs with physical assistance
—	—	—	—	—	—	26. Climbs downstairs using rail, without physical assistance
—	—	—	—	—	—	27. Climbs downstairs using rail, alternates feet
—	—	—	—	—	—	28. Climbs downstairs without rail, alternates feet
						Manipulating a wheelchair
—	—	—	—	—	—	1. Sits comfortably in wheelchair
—	—	—	—	—	—	2. Holds hands on wheels without assistance for 30 seconds
—	—	—	—	—	—	3. Pushes one wheel at a time with assistance
—	—	—	—	—	—	4. Pushes two wheels with assistance
—	—	—	—	—	—	5. Initiates pushing when hands are guided to wheels
—	—	—	—	—	—	6. Finds wheels and initiates pushing when given signal to come (verbal or sign)
—	—	—	—	—	—	7. Can manipulate chair around obstacles

TASK ANALYSIS

1. Child grasps wheels with both hands

2. Child moves hands forward while holding wheels to cause movement of the wheelchair

NON-AMBULATORY MOVEMENT

A. Reciprocal Crawling

1. Position child in crawl position (hands and knees).

2. Place a motivating object, or sound (metronome) a few feet away from the child, within good hearing or seeing distance.

3. Encourage the child to move toward the object. Hold one leg back, forcing the child to pull his leg forward. As he pulls his leg forward, grab the other leg. Continue alternating legs.

B. Scooter Crawling

For the child who cannot yet approximate a belly crawl.

1. Place the child on a scooter board (gym dolly, 1 foot square wooden platform on 4 caster wheels) in a crawl position.

2. Squat or sit on the floor facing the child. Take the child's hands and hold them to the floor, palms down, under yours. This should force the child to pull on her hands, thus pulling her body forward on the scooter board. Reward the child immediately for the forward motion.

3. Diminish pressure on the child's hands as you begin to feel her initiating the pulling, until finally the child should be able to use her hands to move herself along the floor.

4. It is important to continually provide the motivation for movement, be it auditory, visual or tactile stimuli.

C. Manipulating a wheelchair

1. The child must be seated comfortably in the wheelchair. The chair must be suited to the size and shape of the child's body, and any adaptive devices that are needed such as pillows, pads, seatbelts, etc. should be provided. The child should be able to reach the wheels of the chair without discomfort.

2. Place the child's hands on the wheels, first one at a time, until the child becomes used to the new position.

3. Using one arm at a time, introduce the pushing motion by holding the child's arm flexed at the elbow and extending it to cause the hand to push on the wheel.

4. Once the child becomes familiar with this movement, stand behind the wheelchair and prompt the child to push the wheels by pushing or tapping her elbows.

5. Reward for any approximation of self-initiated movement and if possible, provide the child with the motivation to move forward (edible, sound, or light source, etc.)

AMBULATION

A. Use of the walker

There are several types and sizes of walking devices. Some have wheels, some not; some have seats, some not; some offer support under the arms, some at waist level. These can be suited to the type of assistance the child needs.

1. Place the child in the walker 20-30 minutes daily (in addition to time on a 1:1 basis) to encourage random movement. Generally the child will begin initiating backward movement, using both feet simultaneously to push backward.

2. To encourage reciprocal leg movements, stand behind the child and position walker. Prompt the child by nudging child's foot from behind with yours. Reward each step the child completes herself or initiates herself with tangible and verbal reinforcements.

3. Continue step 2 with reciprocal prompting of the legs, until 80% success is achieved.

4. When criteria is reached, fade out the nudge and prompt only by slightly pulling the walker forward.

5. Once the child achieves 80% accuracy in initiating her own steps as the walker is pulled, only assist every other time after the first reward is given.

6. Once criteria (80%) is achieved, assist only every 4th time after the first reward is given. This is to be carried on until the child begins to initiate all forward movement unassisted, in response to intermittent verbal and tangible reinforcement.

7. Once the child is able to move forward independently, he can be taught to follow a sound or light source. Place him in a hallway, in the walker while you stand approximately 5 feet in front of him. Before beginning the exercise, alert the child to the sound he will be following.

8. Standing 5 feet away, elicit the sound (bang drum, ring bell, etc., a flashlight may be used, depending on the stronger residual sense) at fixed intervals until the child reaches the source of the sounds.

9. When the child does arrive at the sound source, reward him with the instrument.

B. Independent walking

Once the child has learned self-locomotion, the most important provision you can make is the development of confidence in movement from place to place and motivation to initiate exploration of and familiarization with the environment constantly stressing independence. Initially, the child will probably rarely move about unless pulled by someone. To develop positive characteristics, there are several suggestions listed below:

1. Encourage the child's increased use of hands as guides in getting from place to place, particularly in unfamiliar surroundings. In the daily environment, however, the child's memory facilities should be developed by requiring him to learn certain frequently traveled routes.

2. To avoid dependence on you for support:

   a. Run an overhead clothesline the length of the classroom, with a loop that the child can hold on to while moving across the room. This forces the child to stand straight, thus improving posture and confident movement.

   b. Use a cane, broomstick, pole, string or other device to separate your hand from the child's when you are assisting in walking. Thus the child does not become too dependent on you and you can reduce the actual amount of assistance by diminishing support at the end of the device. When the child does walk with you, try to encourage the child to walk at your side, holding on with only one hand.

   c. Encourage the child to walk without being pulled by prompting with a tap on the back. This way the child is aware of your proximity but is not totally dependent on you for the execution of movement. Reward every few steps taken independently and gradually increase required steps for criterion to be reached.

3. To encourage a sense of body balance:

   a. Have the child stand on a one-foot square block for brief periods of time, without your support once it is established. Stay closely to offer support when the child begins to lose balance.

   b. Have the child walk backwards without being held or pulled by guiding and prompting with a tap and reinforcing verbally and tangibly.

4. Negotiating stairs:

   a. Begin by offering minimal support, so that the child will use the railing.

   b. Prompt by making a downward motion with her hand or tapping her foot or legs to initiate the activity.

   c. Work slowly and allow the child to gradually build the necessary confidence to negotiate the stairs independently.

1.	2.	3.	4.	5.	6.	
						Holding
—	—	—	—	—	—	1. Does not hold object
—	—	—	—	—	—	2. Holds object placed in hand briefly
—	—	—	—	—	—	3. Holds object placed in hand for a minute or longer
						Grasping
—	—	—	—	—	—	1. Does not grasp
—	—	—	—	—	—	2. Grasps on contact
—	—	—	—	—	—	3. Uses 2 hands to grasp
—	—	—	—	—	—	4. Grasps using just fingers and thumb
—	—	—	—	—	—	5. Grasps with index finger and thumb
—	—	—	—	—	—	6. Uses wrist action in grasping objects
						Finger Movements
—	—	—	—	—	—	1. Cannot move finger without moving entire hand
—	—	—	—	—	—	2. Opens and closes fist with prompting
—	—	—	—	—	—	3. Opens and closes fist independently
—	—	—	—	—	—	4. Can close fist and move thumb with prompting
—	—	—	—	—	—	5. Can close fist and move thumb independently
						Carrying
—	—	—	—	—	—	1. Does not carry
—	—	—	—	—	—	2. Carries using two arms
—	—	—	—	—	—	3. Carries using 2 hands
—	—	—	—	—	—	4. Carries using 1 hand
						Object Manipulation
—	—	—	—	—	—	1. Does not manipulate objects
—	—	—	—	—	—	2. Mouths object
—	—	—	—	—	—	3. Manipulates using both hands
—	—	—	—	—	—	4. Manipulates in one hand
—	—	—	—	—	—	5. Holds and manipulates 1 object in each hand
—	—	—	—	—	—	6. Hits objects together independently
—	—	—	—	—	—	7. Can place objects in containers independently
—	—	—	—	—	—	8. Can hold more than two objects
—	—	—	—	—	—	9. Can place objects in containers with prompting
						Shapes and forms
—	—	—	—	—	—	1. Will not manipulate shapes and forms
—	—	—	—	—	—	2. Inserts simple shapes in proper holes with prompting
—	—	—	—	—	—	3. Inserts simple shapes in proper holes independently

1.	2.	3.	4.	5.	6.	String beads
—	—	—	—	—	—	1. Will not grasp beads
—	—	—	—	—	—	2. Pulls beads off string
—	—	—	—	—	—	3. Will place beads on string held by teacher
—	—	—	—	—	—	4. Places bead on string independently
—	—	—	—	—	—	5. Strings different sized beads

Activities which can be used to develop fine motor coordination

1. Stringing plastic rings.
2. Stringing beads of various sizes (can be used as a prerequisite to lacing)
3. Grasping objects to develop finger control. These objects can be tied to the youngster through the use of button holes or belt loops. This will provide him with the constant stimulation and access of the object or toy.
4. Grasping objects and putting them into containers.
5. Place rings, blocks, or cylinder shaped objects on a peg of equal or smaller size.
6. Placing graduated rings on a stick.
7. Placing graduated plastic cups inside one another.
8. Putting different sized nuts on different sized screws.
9. Stacking blocks.
10. Peg boards - inserting cylinders, geometric shapes and graduated pegs.
11. Size and shape puzzles (number of pieces depends on functioning level of child).
12. Picking up small objects from a table or off the floor to develop use of index finger and thumb control also prerequisites to zipping and buttoning.
13. Zipping.
14. Buttoning.
15. Snapping.
16. Twisting tops on and off bottles (an added incentive for the deaf and blind youngster can be to have scented bottles).
17. Pick up objects from a table surface without sliding them to the edge. This can be done through the use of objects which are graduated in size. Have the student first learn to pick up larger objects and as he becomes proficient, objects gradually become smaller in size.

18. Turning on and off lights, flashlights.

19. Opening doors.

20. Hooking up a chain lock.

21. Locking and unlocking windows.

22. Carrying objects from place to place.

23. Coloring and drawing.

24. Using a scissors.

25. Manipulating gate lock.

SENSORY STIMULATION & TRAINING

VISUAL TRAINING

I. Light Stimulation
II. Eye Contact
III. Visual Tracking

AUDITORY TRAINING

I. Vibration
II. Music

- A. Musical Instruments
- B. Music Listening

III. Receptive Language

- A. Response to name
- B. Simple commands
- C. Identification of objects

TACTILE STIMULATION

1.	2.	3.	4.	5.	6.	Response to Environmental Stimuli
—	—	—	—	—	—	1. Cries and/or smiles
—	—	—	—	—	—	2. Smiles, vocalizes or moves in anticipation of familiar or pleasurable activity
—	—	—	—	—	—	3. Ceases activity in response to new activity
—	—	—	—	—	—	4. Anticipates being picked up; stretches arms to be lifted
—	—	—	—	—	—	5. Expectation in response to repetition of stimulus, (i.e. tickling, physical play)
—	—	—	—	—	—	6. Anticipates daily routine; time sense based on physical needs
—	—	—	—	—	—	7. Anticipates sequential order of a task, (i.e, blinks in anticipation of having face wiped after eating)
—	—	—	—	—	—	8. Pushes adult's hand away when wants to retain an object or as reaction to unpleasant confrontations
—	—	—	—	—	—	9. Tugs, pulls at, pushes adult vaguely about
—	—	—	—	—	—	10. Places adult hand on object and pushes
—	—	—	—	—	—	11. Hands object to adult and waits expectantly
—	—	—	—	—	—	12. Leads adult to what he wants when it is close by
—	—	—	—	—	—	13. Anticipates on basis of physical situation: definite participating action (i.e. when adult begins to get snack ready, child will go to table w/out being sent)
—	—	—	—	—	—	14. Leads adult to what he wants in another room

						Environmental Exploration, Tactile Awareness
—	—	—	—	—	—	1. Does not show interest in environment
—	—	—	—	—	—	2. Curious when new experience presented to him, but does not explore on his own
—	—	—	—	—	—	3. Highly curious and investigative with environment (explores on his own; moves around freely, familiarizes self with surroundings, utilizes residual senses)
—	—	—	—	—	—	4. Is hesitant, often rejects new tactile experiences
—	—	—	—	—	—	5. Shows definite preference for certain textures (i.e. smooth rather than rough, hard rather than soft) reaches for and/or plays with objects of this texture
—	—	—	—	—	—	6. Shows no preference for specific textures, is indifferent to new tactile experiences
—	—	—	—	—	—	7. Very receptive toward new tactile experiences

1.	2.	3.	4.	5.	6.	Object Awareness
—	—	—	—	—	—	1. Does not show interest in objects
—	—	—	—	—	—	2. Holds objects briefly
—	—	—	—	—	—	3. Holds and uses randomly (ie. unintentionally flicks, rattles, bangs, shakes)
—	—	—	—	—	—	4. Uses object for purposeful action (ie. deliberately bangs, shakes, etc)
—	—	—	—	—	—	5. Highly curious and investigative with objects
—	—	—	—	—	—	6. Uses objects generally for self-stimulatory, inappropriate purposes (flicks, bites, mouths, etc.)

						Visual Response
—	—	—	—	—	—	1. No visual response, totally blind
—	—	—	—	—	—	2. Shows minimal residual vision, responds to light sources and shows some brightness sensitivity; no noticeable form recognition.
—	—	—	—	—	—	3. Can make brief eye contact with visual stimulus, cannot fixate
—	—	—	—	—	—	4. Can make eye contact and maintain at least 2 seconds
—	—	—	—	—	—	5. Can make eye contact and track a moving stimulus to the right and left
—	—	—	—	—	—	6. Can make eye contact and track a moving stimulus up and down
—	—	—	—	—	—	7. Can make eye contact and track a moving stimulus in any direction
—	—	—	—	—	—	8. Seems to "lose" tracking ability once stimulus is out of immediate central range of vision
—	—	—	—	—	—	9. Uses residual vision to locate stimuli in close proximity
—	—	—	—	—	—	10. Uses residual vision as an exploratory tool
—	—	—	—	—	—	11. Uses residual vision for guidance in mobility

						Auditory Response
—	—	—	—	—	—	1. No response to sound, totally deaf
—	—	—	—	—	—	2. Some response to sound, but very inconsistent
—	—	—	—	—	—	3. Responds more consistently to vibrations (tactile stimulation) than to sounds.
—	—	—	—	—	—	4. Has ability to localize sound (turns head in direction of sound source)
—	—	—	—	—	—	5. Responds consistently to certain familiar sounds (ie. voice, music, specific musical instruments)
—	—	—	—	—	—	6. Enjoys listening to music
—	—	—	—	—	—	7. Attends to sound of his name (identifies w/that sound)
—	—	—	—	—	—	8. Very limited response to verbal input
—	—	—	—	—	—	9. Shows some response to verbal input, limited receptive Language
—	—	—	—	—	—	10. Shows consistent response to and understanding of verbal input

1.	2.	3.	4.	5.	6.	Auditory Response contd.
—	—	—	—	—	—	11. Responds to simple verbal commands (ie. stand up, sit down, etc.)
—	—	—	—	—	—	12. Accepts hands placed on speaker's face
—	—	—	—	—	—	13. Voluntarily places hand on speaker's face
—	—	—	—	—	—	14. Has limited nonsense vocalizations (babbling, etc.)
—	—	—	—	—	—	15. Imitates simple speech sounds
—	—	—	—	—	—	16. Points to objects, parts of body, etc. upon verbal request

SENSORY STIMULATION & TRAINING

Visual Training

PROCEDURE

Visual training is used to develop and encourage the use of residual vision, whether it be response to simple light stimuli or training to develop eye control and recognize forms. Depending on degree and the nature of the visual impairment, different activities can be oriented to the individual child. However, it is important not to develop or encourage light-gazing, for that can present more problems when the child needs to be able to attend to a task. It is necessary to achieve the delicate balance between stimulation and distraction.

I. LIGHT STIMULATION

A. Construct a reflective box by lining the inside of a cardboard box that will sit on a desk or table (or even surround the child) with aluminum foil.

1. Position the box on table so that opening faces where the child will be sitting. Hook a bright intensity light up somewhere inside the box (preferably in a back top corner) and place or hang objects (toys, musical instruments, food, candy, mirrors) in the box to encourage the child to explore.

2. Change the color and intensity of the light occasionally to maintain the child's interest in the activity.

B. Darken an area of the room (a makeshift tent in a corner somewhere) and work on developing the child's ability to focus on and track the spot from a flashlight.

C. Use a lighted cosmetic mirror to work on eye contact. Usually they have two sides: one which reflects a normal image and one which reflects a somewhat magnified image. The child can be reinforced for making eye contact with his image; starting with the magnified image makes it easier because of the enlargement factor. This cosmetic mirror can also be used to teach the child identification of eyes, nose, ears, mouth and other facial characteristics.

II. EYE CONTACT

Once again, the mirror can be used to develop eye contact. However, it is best to establish eye contact between student and teacher first, to lay the foundation for other programs requiring some degree of attentiveness.

1. Take the child to a quiet environment with minimal visual distraction. The light in the room should be bright and evenly distributed.

2. Sit facing the child on a table or a mat. Using some type of edible reinforcement or a finger puppet or other distracting object, hold the stimulus at your eye level, saying "(child's name), look at me." When the child makes eye contact, reward immediately.

3. If the child does not respond within 15 seconds, physically manipulate his head so that his eyes make contact with yours.

4. Continue this task until the child achieves 90% success, then replace the initial stimulus with your index finger held in front of your nose and repeat Steps 2 & 3.

5. When criterion (90%) is reached, remove all visual stimuli and require the child to respond only to the verbal cue.

6. When 90% accuracy is attained, go on to Part III.

III. VISUAL TRACKING (See also Part B in Light Stimulation)

1. Take the child to a quiet environment with minimal distraction; the light in the room should be bright and evenly distributed.

2. Sit with the child at a table or on the floor with a functional object in front of him.

3. When the child looks at the object (in response to verbal initiating cue) move the object and reinforce the child for maintaining eye contact with the object.

4. Continue this until the child is consistently able to track the object with 90% success for 3 consecutive sessions.

5. Substitute your finger for the object and reinforce for maintaining eye contact with the moving finger.

6. Begin generalizing by varying the object and implement the program in a more varied, active environment.

7. Steps 1-4 can also be used with a hand mirror, by moving it and rewarding the child for following his image.

AUDITORY TRAINING

PROCEDURE

As with visual handicaps, auditory impairments in deaf/blind children will vary greatly in nature and degree. If a child is functionally deaf, he could be blocking out sound because he cannot attach meaning to it; it is simply "noise" to him and after a while he isn't even aware of it. It is difficult to determine if this is the case with a particular child, particularly if his responses were inconsistent or inconclusive in an audiological evaluation. Therefore, it is necessary to attempt different approaches to eliciting responses and awareness of auditory stimuli.

I. VIBRATION

The child who has poor residual hearing can benefit from the physical aspect of sound - vibrations. This is really a means of combining tactual and auditory stimulation for optimum response.

A. Sound Box - build a makeshift soundbox by placing 2 hifi speakers flat on the floor next to each other and cover them with a strong plexiglass, plywood, or plastic box (preferably at least 36 inches long) turned upside down.

1. Place the child supine on the box and turn on music to high volume. The child then experiences both the auditory and tactual facets of the music because of the contact between the vibrations coming through the box and her body.

2. Beginning with 10 minutes the first day, increase the activity each day and introduce different types of music to provide variation in vibrations.

3. Work with the child on rhythm (clapping, playing a loud drum) using the stronger vibrations to set the tempo.

4. Reward the child for any self-initiated response to the sound - clapping, smiling, vocalizations. This activity is usually very relaxing when slower music is played and can therefore be used to soothe a tense or overactive child.

II. MUSIC

Because of the variety of sounds and moods involved in music, it is a particularly amenable tool for sound awareness. Whether or not there are provisions for a music specialist in your program, there are a number of ways to include music in the daily classroom routine. The one quality of music that differentiates it from language, or sound identification or other auditory stimuli, is that you do not have to understand it to enjoy it - you need only to listen.

A. Musical instruments

Musical instruments can be used to combine a variety of objectives - auditory response, grasping, attending to a task. Introduce one instrument at a time initially and have the child become thoroughly familiar with its sound and its use before another is introduced. If a child shows a particular preference for certain instruments and a specific dislike for others, use these appropriately to make music involvement a positive experience for the child.

B. Music listening

The use of headphone sets is a particular advantage to music listening, because (a) it blocks out environmental noise (b) it forces the child to attend to only one task - listening - and thereby develops the use of residual hearing and (c) it helps teach concentration and widens the attention span. Occasionally, the child will not respond favorably to the headsets, for undeterminable reasons. Following is a basic structure for a program to introduce tolerance of the headsets. The duration of intervals will vary from those below depending on the behavior of the individual child.

1. While the child is either in the standing table or seated comfortably, place the headphones first next to the child's ears so that she can hear the music.

2. Then put the headphones on the child's head and ears and immediately reinforce the child if she accepts them.

3. If the child attempts to remove them, immediately hold her hands down for 20 seconds or as soon as the child relaxes her hands. (If the child reacts negatively to having her hands held down, a tie can be placed around the headset and tied under the child's chin.)

4. After 20 seconds of listening and for each successive 20 seconds of tolerated listening, the child is to be rewarded with tangible and social reinforcement.

5. Once the child achieves 80% success with 20 second intervals (8 uninterrupted intervals for every 10) the intervals are to be increased by 10 seconds, to 30 second intervals.

6. Once criterion is achieved, continue this pattern (10 second increase in intervals) using 80% success as criterion for increase until 60 second intervals are reached.

7. Once the child's tolerance has increased to one minute, the reinforcement schedule will be based on one minute intervals with 80% success. Begin fading primary reinforcer.

8. When criterion is reached for 5 uninterrupted minutes, eliminate primary reinforcer and use only intermittent verbal and social reward.

9. After tolerance for 5 minutes is reached, increase the daily interval by as much as the child will tolerate.

10. It would be helpful to note any differentiations in the child's response to different kinds or volumes of music and use the ones which elicit a more positive response for the initial program.

III. RECEPTIVE LANGUAGE

As mentioned previously, the child who is functionally deaf may have the capacity to receive auditory stimuli but does not respond because his ability to process what he hears is not refined. It is sometimes possible to develop this processing ability by teaching the child the appropriate response to specific auditory stimuli; once it has been determined that the child can hear to some degree. First on the priority list for receptive language should be the child's ability to respond to his name.

A. Response to Name

1. Child is seated in chair, you sit to one side of child.

2. Say child's name. If no response occurs within 5 seconds, turn the child's head towards direction of sound, hold it there for 2 seconds and reinforce that behavior.

3. Say the child's name. If no response occurs within 5 seconds, offer physical prompt (touches chin) and reinforces that behavior.

4. If the child independently turns head in direction of your voice, this response is immediately rewarded.

5. Once criterion for success is achieved with Step 4, couple this program with the eye contact program (See visual training, Part IIA) if the child has appropriate vision and require him to turn toward the source of the sound and make eye contact for 2 seconds with the person who calls his name.

B. Simple Commands

The above program's basic format can be used to introduce an understanding of simple commands such as stand up, sit down, come, pick up, put down, give it (any object not named) to me, etc. This is done through offering physical assistance at first, then rewarding close approximations initiated by physical assistance, followed by rewarding for independent successful responses.

C. Identification of Objects

This type of program has as a prerequisite, the comprehension of the simple command "give it to me." Once the child knows the appropriate response to the command, he can then be taught the word symbols for certain relevant objects by once again following the same format.

Example:

1. Say "give (the ball) to me."

2. If no response occurs within 5 seconds, prompt the child to place the ball in your hands and reward this behavior.

3. Repeat command. If no response occurs within 5 seconds, tap the ball to cue the proper response and then physically prompt if necessary.

4. When the child does elicit a correct response within 5 seconds, immediately reward this behavior.

5. Determine criteria for success and when it is reached introduce another object, individually and follow the same criteria.

6. Once more than one object has been taught, introduce two at a time to develop discrimination and memory skills. When the child attains criteria for discriminating between two objects, three objects are introduced, etc., following the same procedure.

TACTILE STIMULATION

For the deaf-blind child, the sense of touch is one that can and should be highly developed to compensate for the other sensory losses. Exposure to a variety of tactual experiences can provide a basis for stimulation, motivation, experimentation and exploration. The use of the child's hands to provide a contact point between self and surroundings should be encouraged. However, if the child's residual vision can be trained for optimum use, too much dependence on the manual should be discouraged. In all cases, the tactile sense can be used positively simply as an alternative means of awareness. In addition, one frequent advantage of tactile activities is that since they usually involve a certain level of exploratory independence, they can be scheduled during a child's free time and would not require constant supervision or assistance. Below are suggested activities to stimulate tactile awareness:

1. Use an electric hairdryer or electric toothbrush to develop body awareness through the vibrations. Allow the child to hold and manipulate it, as well as using it to encourage reaching and grasping.

2. Water play: Place the child at a sink or at a table with a basin of water in front of her. Encourage self-initiated play (splashing, bubbles). Change the temperature of the water occasionally and add bubble bath to give the water a new feeling. This is a good activity to use prior to beginning a washing program.

3. Introduce contrasting textures (ie. soft vs. hard, rough vs. smooth) through the use of material such as sandpaper, powder puffs, different textured fabrics (corduroy, carpeting) feathers, fur, sand, string. Carpet samples of different pile thicknesses can be attached to make a patchwork rug on which the child can lie and explore textures. This can develop a discrimination of tactual experiences and eventually both you and the child will know the child's tactual preferences.

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